

REMARKS

This is in response to the Office Actions dated February 25, 2005 and November 2, 2004.

Claims 1-4 are pending.

Claim 1 stands rejected under 35 U.S.C. Section 102(b) as being allegedly anticipated by Kato. This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires that "the position of the center of each of the light-focusing parts is shifted gradually larger toward the center of the camera region based on the position of each of the light-receiving parts corresponding to the light-focusing parts and the size along the substrate surface in the lateral direction of each of the light-focusing parts becomes gradually larger, as the location of the light-focusing part is getting closer to the peripheral camera region from the middle camera region on the substrate in the front of the exit pupil." In other words, the size of the lenses or light-focusing parts becomes gradually larger toward the periphery. For example purposes of understanding, *Exhibit 1 attached hereto* compares an example of the instant invention with the cited reference Kato.

Kato discloses a solid-state camera device comprising a plurality of light-receiving parts arranged at a constant interval on a substrate surface, and a plurality of light-focusing parts disposed corresponding to each of the light-receiving parts so that incident light is focused on the light-receiving parts. In Kato, the position of each of the light-focusing parts is shifted gradually larger toward the center of the camera region. However, Kato fails to disclose or suggest that the size along the substrate surface in the lateral direction of each of the light-focusing parts becomes larger as the location of the light-focusing part is getting closer to the peripheral camera region from the middle camera region. See Exhibit 1 attached hereto.

The Office Action appears to define an "interval" between microlenses as a distance between edges of two adjacent micro lenses; not a distance between positions of the centers of the microlenses. The Office Action also assumes that there is a one-to-one correspondence between the microlenses and the photocells arranged at a constant interval, and that the position of the microlenses does not change. Thus, the Office Action seems to assume that as the distance between the microlenses gets closer, their size becomes larger in order to shorten the distance between the microlenses (see Ex. 1).

However, Kato defines the interval of microlenses in the central area as MC and in the peripheral area MH or MV (see col. 4, line 66 to col. 5, line 12). According to Fig. 1, these intervals MC, MH or MV indicate a distance between positions of the centers of the microlenses – not a distance between edges of adjacent microlenses. Moreover, a one-to-one correspondence between photocells and microlenses does not necessarily mean that the consistency of the positions of photocells and microlenses. Therefore, it is not inherent that their size becomes gradually larger in order to shorten the distance between the microlenses.

In contrast, in Fig. 1 and pages 14-16 of the instant application, for example and without limitation, a solid-state camera is provided where the position of the center of each of the light-focusing parts is shifted gradually larger toward the center of the camera region, and the size along the substrate surface in the lateral direction of each of the light-focusing parts becomes gradually larger as the location of the light-focusing parts gets closer to the peripheral camera region from the middle (e.g., see Ex. 1).

Accordingly, Kato fails to disclose or suggest that the size along the substrate surface in the lateral direction of each of the light-focusing parts becomes larger as the location of the light-

focusing part is getting closer to the peripheral cameral region from the middle camera region as required by claim 1.

Kato explains that the "shape" of the lenses may change moving toward the periphery, so that curvature and thus power of the lenses may be increased toward the periphery of the device (e.g., col. 3, lines 20-24; and col. 5, lines 47-51). However, Kato fails to disclose or suggest changing the size of the lenses to make them "larger" in size moving toward the periphery as required by claim 1. While Kato states that shape may change, there is no disclosure of making the size of the lenses larger in the lateral direction toward the periphery as required by claim 1.

Moreover, it will be seen that Kato actually teaches directly away from the invention of claim 1. In Kato, in order to increase curvature and thus the power of the lenses, the size of the lenses in Kato in the direction along the substrate would become smaller (the opposite of "larger" required by claim 1) moving toward the periphery, or the thickness would increase. Thus, it can be seen that Kato actually teaches the direct opposite of what claim 1 requires. Kato would change lens size by making lenses smaller toward the periphery, whereas the invention of claim 1 requires the opposite since it requires that the size of the lenses becomes larger toward the periphery. Kato is entirely unrelated to the invention of claim 1 in this regard.

It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

KAMIMURA et al.

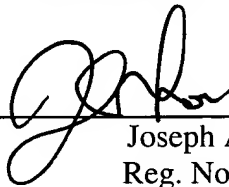
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Respectfully submitted,

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Table: Schematic illustrations showing arrangements for micro lenses

	the Actual Structures	the Examiner's Interpretation
Prior Art		
Kato's Invention		
Example of Present Invention		
A symbol "O" represents a micro lens. A symbol " " represents a center position of a micro lens. A symbol " ↔ " represents an interval between micro lenses.		

Exhibit 1